

IN THE CLAIMS

Claim 1 (currently amended): A method for catalytically oxidizing organic molecules comprising:
passing a solution containing organic molecules over a catalyst to catalyze the oxidation of
the organic molecules in the solution, said catalyst comprising a discrete mixture of platinum
particles and cobalt particles.

Claim 2 (original): The method as defined in claim 1 wherein said catalyst is supported on an
electrode.

Claim 3 (canceled)

Claim 4 (currently amended): A method for catalytically oxidizing organic molecules comprising:
passing a solution containing organic molecules over an electrode to catalyze the oxidation
of the organic molecules in the solution, said electrode comprising a discrete mixture of platinum
particles and cobalt particles.

Claim 5-6 (canceled)

Claim 7 (currently amended): An apparatus as defined in claim 6 The method of claim 1 wherein
said platinum is present in an amount within the range of about 52 to about 99 weight percent of the
total weight of the composition catalyst.

Claim 8 (currently amended): An apparatus as defined in claim 6 The method of claim 1 wherein
said cobalt is present in an amount within the range of about 48 to about 1 weight percent of the
total weight of the composition catalyst.

Claim 9 (currently amended): An apparatus as defined in claim 6 The method of claim 1 wherein
said composition catalyst further comprises metal oxides of said cobalt.

Claim 10 (currently amended): An apparatus as defined in claim 9 The method of claim 9 wherein
said metal oxides of said cobalt are the products of reactive electrodeposition.

Claim 11 (currently amended): ~~An apparatus as defined in claim 6~~ The method of claim 1 wherein said cobalt is present in an oxidation state of 0, 2, 8/3 or 3.

Claim 12 (currently amended): ~~An apparatus as defined in claim 6~~ The method of claim 1 wherein said ~~composition catalyst~~ further comprises Sn in an amount not greater than about 10 atom percent of the total ~~composition catalyst~~.

Claim 13 (currently amended): ~~An apparatus as defined in claim 6~~ The method of claim 1 wherein said ~~composition catalyst~~ further comprises a mixture of carbon and polytetrafluoroethylene.

Claim 14 (currently amended): ~~An apparatus as defined in claim 6~~ The method of claim 4 wherein said electrode is a metal electrode.

Claim 15 (currently amended): ~~An apparatus as defined in claim 6~~ The method of claim 4 wherein said electrode is a metal foam electrode.

Claim 16 (currently amended): ~~An apparatus as defined in claim 6~~ The method of claim 4 wherein said electrode is a graphite electrode.

Claim 17 (currently amended): ~~An apparatus as defined in claim 6~~ The method of claim 4 wherein said electrode is a porous carbon electrode.

Claim 18 (currently amended): ~~An apparatus as defined in claim 6~~ The method of claim 4 wherein said electrode is a flooded electrode.

Claim 19 (currently amended): ~~An apparatus as defined in claim 6~~ The method of claim 4 wherein said electrode is an anode in an electrochemical device.

Claim 20 (currently amended): ~~An apparatus as defined in claim 6~~ The method of claim 4 wherein said electrode is part of a fuel cell.

Claim 21 (currently amended): ~~An apparatus as defined in claim 6~~ The method of claim 4 wherein said electrode is part of a reactor used to synthesize gluconic acid.

Claim 22 (currently amended): An apparatus as defined in claim 6 The method of claim 4 wherein said electrode is part of a glucose sensor.

Claim 23 (currently amended): An electrode structure comprising: The method of claim 4 wherein said electrode comprises said mixture coated on a platinum wire having a coating, said coating comprising a discrete mixture of platinum particles and cobalt particles.

Claim 24-25 (canceled)

Claim 26 (currently amended): An electrode structure comprising: The method of claim 4 wherein said electrode comprises a nickel current collector having a coating, said coating comprising a mixture of activated carbon, acetylene black, PTFE and a catalyst, said catalyst comprising a discrete mixture of platinum particles and said cobalt particles.

Claim 27 (currently amended): The electrode structure as defined in The method of claim 26 wherein said nickel current collector is comprised of nickel foam.

Claim 28 (currently amended): The electrode structure as defined in The method of claim 26 wherein said nickel current collector is comprised of nickel mesh.

Claim 29 (currently amended): A method for catalytically oxidizing glucose comprising:
passing a solution containing glucose molecules over a catalyst to catalyze the oxidation of the glucose molecules in the solution, said catalyst comprising a discrete mixture of platinum particles and cobalt particles.

Claim 30 (original): The method as defined in claim 29 wherein said catalyst is supported on an electrode.

Claim 31 (currently amended): A method for catalytically oxidizing glucose comprising:
passing a solution containing glucose molecules over an electrode to catalyze the oxidation of the glucose molecules in the solution, said electrode comprising a discrete mixture of platinum particles and cobalt particles.

Claim 32 (canceled)

Claim 33 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 29 wherein said platinum is present in an amount within the range of about 52 to about 99 weight percent of the total weight of the composition catalyst.

Claim 34 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 29 wherein said cobalt is present in an amount within the range of about 48 to about 1 weight percent of the total weight of the composition catalyst.

Claim 35 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 29 wherein said composition catalyst further comprises metal oxides of said cobalt.

Claim 36 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 35 wherein said metal oxides of said cobalt are the products of reactive electrodeposition.

Claim 37 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 29 wherein said cobalt is present in an oxidation state of 0, 2, 8/3 or 3.

Claim 38 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 29 wherein said composition catalyst further comprises Sn in an amount not greater than about 10 atom percent of the total composition catalyst.

Claim 39 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 29 wherein said composition catalyst further comprises a mixture of carbon and polytetrafluoroethylene.

Claim 40 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 31 wherein said electrode is a metal electrode.

Claim 41 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 31 wherein said electrode is a metal foam electrode.

Claim 42 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 31 wherein said electrode is a graphite electrode.

Claim 43 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 31 wherein said electrode is a porous carbon electrode.

Claim 44 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 31 wherein said electrode is a flooded electrode.

Claim 45 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 31 wherein said electrode is an anode in an electrochemical device.

Claim 46 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 31 wherein said electrode is part of a fuel cell.

Claim 47 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 31 wherein said electrode is part of a reactor used to synthesize gluconic acid.

Claim 48 (currently amended): ~~An apparatus as defined in claim 32~~ The method of claim 31 wherein said electrode is part of a glucose sensor.